UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,772	07/17/2003	Wayne Patrick O'Brien	064749.0152	1688

5073 7590 07/09/2009

BAKER BOTTS L.L.P.
2001 ROSS AVENUE
SUITE 600
DALLAS, TX 75201-2980

EXAMINER	
WEI, ZHENG	
ART UNIT	PAPER NUMBER
2192	

NOTIFICATION DATE	DELIVERY MODE
07/09/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptomail1@bakerbotts.com
glenda.orrantia@bakerbotts.com

Office Action Summary	Application No.	Applicant(s)	
	10/621,772	O'BRIEN, WAYNE PATRICK	
	Examiner	Art Unit	
	ZHENG WEI	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 April 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Remarks

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/30/2009 has been entered.

2. This office action is in response to the amendment filed on 04/30/2009.

3. Claims 1, 7, 13, 19-23, 25-27, 29-31, 33 and 34 have been amended.

4. Claims 1-34 remain pending and have been examined.

Response to Arguments

5. Applicant's arguments filed on 04/30/2007, in particular on page 20, have been fully considered. However, Garloff still teaches such limitation as modified in claims 1-34. Please see details as in following rejections.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable by Garloff (Garloff et al., US 5,699,310).

Claim 1:

Garloff discloses a method, a system and procedure logic for designing a computer program, comprising:

- accessing a plurality of domain rules, each domain rule (GENERATION KNOWLEDGE BASE) being invariant (see for example, Fig.1A, Fig.1B, "GENERATION KNOWLEDGE BASES INCLUDE: GENERATION RULES" and related text; also see Fig.2, "OPEN KBASE(S) AND DISPLAY INITIAL WINDOW" and related text; also see col.31, line 27-col.32, line 18 about computer system);
- defining a domain from the domain rules, (see for example, col.4, lines 45-46, "The Developer writes the specifications and store them in the Specifications Knowledge Base" and related text; also see col.3, lines 18-20, "The Developer can also use the Operator Interface to add his own specifications to the Specification Knowledge Base");
- identifying one or more requirements of the domain from one or more supplemental sources (see for example, Col.4, lines 38-40, "By adding a Process Model, we are adding the Methods needed to perform a specific task");
- generating a model that established the requirements of the domain (see for example, Fig.11, a model of an object and related text; also see col.4, lines

57-62, "The Developer may choose to create some Classes and Process Models that make the specification clearer or easier to completer. These Classes and Process Models then may be considered a part of the specification.");

- accessing a plurality of business rules, each business rule (DESIGN KNOWLEDGE BASES and SPECIFICATIONS KNOWLEDGE BASE) being variable, the plurality of business rules comprising a plurality of rules of engagement (rules in KBASES)(see for example, Fig.2, "OPEN KBASE(S) AND DISPLAY INITIAL WINDOW" and related text);
- associating the one or more business rules with the model (see for example, Fig.1A, Fig.1B, "DESIGN KNOWLEDGE BASES", "SPECIFICATIONS KNOWLEDGE BASE", "INHERITANCE ENGINE" and related text);
- generating a code corresponding to the model in order to design a computer program (see for example, Fig.1A, "GENERATION PROCESS", "SOURCE CODE" and related text).

But does not explicitly disclose the domain used to determine a problem space and a solution space. However, Garloff also discloses the domain (specification) which is used to fully define the functionality and operations of the application that is being built (the Target Application) (see for example, col.4, lines 52-54). Therefore, it would have been obvious to one having ordinary skill in the art to understand that such specification including objects, classes and process models is used to determine the problem and solution space (methods/functionality of

objects) (see for example, col.4, col.4, lines 34-36, "For example, a Process Model may be added to a Window to provide the functionality needed to start another Window.")

Claim 2:

Garloff further discloses the method of claim 1, further comprising:

- collecting the domain rules and the business rules (see for example, Fig.1A, Fig.1B, "DESIGN KNOWLEDGE BASES", "SPECIFICATIONS KNOWLEDGE BASE", "GENERATION KNOWLEDGE BASES","INHERITANCE ENGINE" and related text);
- allocating the domain rules and the business rules to a plurality of use cases;
- realizing the use cases (see for example, Fig.7A and related text); and
- assessing the domain rules and the business rules in accordance with the realization (see for example, Fig.2, "CHECK SPECIFICATIONS", Fig.6 and related text).

Claim 3:

Garloff also discloses the method of claim 1, further comprising:

- checking a syntax of the code (see for example, Fig.6 and related text, also see col.9, line 66- col.10, line 2, "reviewing Methods for proper syntax"); and

- providing a notification if a syntax error is detected (see for example, Fig.6, "DISPLAY ERRORS" and related text).

Claim 4:

Garloff further discloses the method of claim 1, further comprising:

- checking a logical consistency of the code (see for example, Fig.6, "CHECK ATTRIBUTES AND METHODS FOR REFERENCES AND CORRECTNESS. DISPLAY ERRORS" and related text); and
- providing a notification if a logical inconsistency is detected (see for example, Fig.6, "DISPLAY ERRORS" and related text).

Claim 5:

Garloff also discloses the method of claim 1, further comprising:

- checking a compatibility between the model and the code (see for example, Fig.6, "CHECK ATTRIBUTES AND METHODS FOR REFERENCES AND CORRECTNESS. DISPLAY ERRORS" and related text); and
- providing a notification if an inconsistency is detected (see for example, Fig.6, "DISPLAY ERRORS" and related text).

Claim 6:

Garloff further discloses the method of claim 1, wherein the model is expressed according to a modeling language (see for example, col.5, lines 47-53,

"Modeler's language").

Claims 7-12:

Claims 7-12 are a logic (procedure/method) version for performing the claimed method in claims 1-6 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Garloff's teachings also anticipate claims 7-12.

Claims 13-19:

Claims 13-19 are system version for performing the claimed method as in claims 1-6 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above (see for example, col.31, line 27 – col.32, line18). Therefore, Garloff's teachings also anticipate claims 13-19.

Claim 20:

Claim 20 is another method version for performing the claimed method in claims 1-6 addressed above, but Garloff does not explicitly disclose the rules are for a military theory. However, because the structure/definition about military theory has not been defined, the limitation of the military theory and/or rule of engagement can be treated as rules and directions as in Garloff (Fig.1B and related text; also see col.3, lines46-47, "Knowledge Base contains the rules and directions for generating source code from the specifications") and has no impact

to the scope of claim. It is obvious that cited rules from Garloff could be the rules for military theory or for any other theories that are non-military theory. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to design, access and display a plurality of domain/business rules also can be applied for a military theory.

Claim 21:

Garloff discloses a method for managing rules for designing a computer program, comprising:

- accessing a plurality of military theory rules for a military theory (see for example, Fig.1A, Fig.1B, "DESIGN KNOWLEDGE BASES", "SPECIFICATIONS KNOWLEDGE BASE", "GENERATION KNOWLEDGE BASES","INHERITANCE ENGINE" and related text);
- identifying military theory rules required by the laws as a plurality of domain rules of a military theory, each domain rule being invariant, (see for example, Fig.1B, "INHERITANCE ENGINE" and related text, also see Fig.3, "DISPLAY LIST OF KBASES" and related text);
- defining a domain from the domain rules, (see for example, col.4, lines 45-46, "The Developer writes the specifications and store them in the Specifications Knowledge Base" and related text; also see col.3, lines 18-20, "The Developer can also use the Operator Interface to add his own specifications to the Specification Knowledge Base");

- identifying one or more requirements of the domain from one or more supplemental sources (see for example, Col.4, lines 38-40, "By adding a Process Model, we are adding the Methods needed to perform a specific task");
- generating a model that established the requirements of the domain (see for example, Fig.11, a model of an object and related text; also see col.4, lines 57-62, "The Developer may choose to create some Classes and Process Models that make the specification clearer or easier to completer. These Classes and Process Models, then may be considered a part of the specification.");
- designating the other military theory rules as a plurality of business rules of the military theory, the business rules comprising a plurality of rules engagement, each business rule being variable (see for example, (Fig.1B and related text; also see col.3, lines46-47, "Knowledge Base contains the rules and directions for generating source code from the specifications"; also see Fig.3, step "Add a KBASE" and related text)); and
- providing a rule of engagement from the stored business rules in response to a request for the business rule (see for example, Fig.3, "DISPLAY LIST OF KBASES" and related text).

but Garloff does not explicitly disclose the rules are for a military theory, a plurality of legislated laws are associated with the military theory and the domain is used to determine a problem space and a solution space.

However, because the structure/definition about military theory has not been defined, the limitation of the military theory and/or rule of engagement can be treated as rules and directions as in Garloff (Fig.1B and related text; also see col.3, lines46-47, "Knowledge Base contains the rules and directions for generating source code from the specifications") and has no impact to the scope of claim. It is obvious that cited rules from Garloff could be the rules for military theory or for any other theories that are non-military theory. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to design, access and display a plurality of domain/business rules also can be applied for a military theory. Moreover, it is also obvious that the legislated laws associated with the military theory are some kinds of different rule/requirements for the military. The method used by Garloff to access KBASES which contains generation rules can also be used to accessing laws associated with the any theory/rule/requirement including legislated laws associated with the military theory. Further Garloff also discloses the domain (specification) which is used to fully define the functionality and operations of the application that is being built (the Target Application) (see for example, col.4, lines 52-54). Therefore, it would have been obvious to one having ordinary skill in the art to understand that such specification including objects, classes and process models is used to determine the problem and solution space (methods/functionality of objects) (see for example, col.4, col.4, lines 34-36, "For example, a Process Model may be added to a Window to provide the

functionality needed to start another Window.")

Claim 22:

Garloff further discloses the method of claim 21, further comprising:

- customizing the provided rule of engagement(see for example, Fig.3, "CHANGE A KBASE" and related text);
- associating the customized rule of engagement with the model (see for example, Fig.4, "CREATE FULLY INHERITED VIEW OF OBJECT" and related text); and
- generating a code corresponding to the model in order to design a computer program (see for example, Fig.2, "GENERATE", Fig.1C, "GENERATION PROCESS", Fig.7A and related text)

Claim 23:

Garloff also discloses the method of claim 21, further comprising:

- associating the domain rules with the model (see for example, Fig.1A, Fig.1B, "GENERATION KNOWLEDGE BASE" and "INHERITANCE ENGINE" and related text); and
- generating a code corresponding to the model in order to design a computer program (see for example, Fig.2, "GENERATE", Fig.1C, "GENERATION PROCESS", Fig.7A and related text).

Claim 24:

Garloff further discloses the method of claim 21, further comprising:

- allocating the domain rules and the business rules to a plurality of use cases (see for example, Fig.1A, Fig.1B, "GENERATION KNOWLEDGE BASE" and "INHERITANCE ENGINE" and related text; also see Fig.7A and related text);
- realizing the use cases (see for example, Fig.7A, "WRITE SOURCE MODULES TO DISK FILES" and related text); and
- assessing the domain rules and the business rules in accordance with the realization (see for example, Fig.6 and related text for checking).

Claims 25-28 and 33:

Claims 25-28 and 33 are system version for performing the claimed method as in claims 21-24 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above (see for example, col.31, line 27 – col.32, line18). Therefore, they are also obvious by Garloff's teachings.

Claims 29-32:

Claims 29-32 are a logic (procedure/method) version for performing the claimed method in claims 21-24 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, they are also obvious by Garloff's teachings.

Claim 34:

Claim 34 is another method version for performing the claimed method in claims 21-24 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, it is also obvious by Garloff's teachings.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571) 270-1059 and Fax number is (571) 270-2059. The examiner can normally be reached on Monday-Thursday 8:00-15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571- 272-1000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. W./
Examiner, Art Unit 2192

/Tuan Q. Dam/
Supervisory Patent Examiner, Art Unit 2192